

**NEXENERGY**

Powering Resilient Infrastructure Worldwide



NEX Energy is a global energy solutions provider focused on delivering resilient, scalable infrastructure across critical energy markets. Operating across the U.S., Latin America, and Europe, we bring deep regional access, strategic partnerships, and project execution experience to accelerate deployment of advanced energy systems. We work closely with commercial, industrial, utility, and public sector stakeholders to drive adoption of next generation solutions and unlock new market opportunities.



# Strategic Market Focus



## DATA CENTERS



- ✓ AI and hyperscale expansion are driving massive demand for reliable, long duration power
- ✓ Direct access to top developers, engineers, and enterprise end users across 27+ national & global markets

## UTILITIES



- ✓ Grid modernization and renewable mandates require scalable, non-lithium storage solutions
- ✓ Strong ties with developers, utilities, and policy leaders in regions facing peak load stress and infrastructure limitations

## EV CHARGING INFRASTRUCTURE



- ✓ Electrification is outpacing grid capacity, creating demand for local buffering and solar paired storage
- ✓ Early partnerships with corridor planners, fleet operators, and integrated charging network developers



# Strategic Market Focus

## RENEWABLE ENERGY DEVELOPERS

- ✓ Storage is essential for solar/wind firming, grid access, and bankable PPA models
- ✓ Active collaboration with developers, EPCs, and clean energy financiers across North and South America

## TELECOM & CRITICAL INFRASTRUCTURE

- ✓ Decentralized, resilient power is critical for telecom networks, government facilities, and defense assets
- ✓ Strong traction with telecom integrators, rural deployment partners, and government energy programs in the U.S. and LATAM



## C&I AND HEALTHCARE

- ✓ Energy-intensive campuses and facilities are investing in backup, peak shaving, and operational resilience
- ✓ Embedded in national manufacturing, logistics, real estate, and healthcare infrastructure networks through trusted design/build partners and consultants



# NexPack Product Benefits

## Containerized Energy Storage

Reliable, scalable, and maintenance-free power for any application.



### Affordable & Turnkey

- Available in 10 ft, 20 ft, and 40 ft containerized systems
- Fully integrated, >95% pre-assembled “plug-and-play” solution
- Delivers stable, consistent, and maintenance-free electricity from kWh to multi-GWh



### Safe & Reliable

- Multi-layered protection with DC fast-break and anti-arc safeguards
- Integrated fire suppression, HVAC, and distribution systems
- IP54-rated enclosure for harsh environments



### Efficient & Flexible

- Over 500,000 cycles at 1C with zero degradation
- Modular, scalable design supports parallel connection and easy expansion
- Bi-directional PCS with multiple operating modes (on-grid and off-grid)



### Smart & Robust

- Intelligent energy storage management with real-time monitoring
- Automated fault detection, recording, and diagnostics
- Integrated performance logging for predictive maintenance



### Key Features

- 10-40 ft turnkey container with battery system, PCS, HVAC, fire suppression, and transformer
- Nanosecond switching for UPS ride-through and uninterrupted AI workloads
- Bi-directional PCS for optimized charge/discharge and grid interaction
- Extreme environment operation (-22 °F to +158 °F / -30 °C to +70 °C)
- Scalable capacity from 400 kWh racks to 2GWh+ (45.5 MWh skids)





## Key Value Propositions for AI & Data Centers

- **Unmatched Longevity**

25-year lifespan, >500,000 cycles, zero degradation (ideal for continuous AI workloads).

- **Instant Response**

Nanosecond switching, up to 12C discharge for UPS ride-through and GPU cluster protection.

- **Safety First**

No thermal runaway, no chemicals, fire-safe operation lowers risk and insurance costs.

- **Scalable Design**

From rack to container, deployable across hyperscale, colocation, and edge environments.

- **Extreme Conditions Ready**

Operates from  $-30^{\circ}\text{C}$  to  $+65^{\circ}\text{C}$  with no cooling load, avoiding additional HVAC strain.

- **Lowest LCOS in the industry**

Reduces OPEX vs diesel and lithium solutions.

- **Sustainability & ESG Compliance**

Eliminates diesel emissions, enables carbon-neutral AI growth.



# Addressing Today's Biggest Challenges

Challenge	With Diesel	With Lithium BESS	With NexEnergy
Uptime & Response	Minutes to start	Seconds	Nanoseconds, instant switchover
AI Workload Readiness	Not scalable for GPU clusters	Degrades under continuous cycling	500,000+ cycles AI-ready
Lifespan	10–15 years	7–10 years (with degradation)	25+ years, no degradation
Fire & Safety	Fire/fuel risks	Thermal runaway, fire hazard	No fire risk, chemical-free
Cooling & Energy Use	Not applicable	Requires HVAC load	No cooling required
Carbon Emissions	Very high	Medium	Zero
OPEX	High (fuel + maintenance)	High (cooling + replacements)	Low (maintenance-free)



## Powering the AI Era

AI training and inference workloads drive 10–50x higher power density than traditional data halls. NexPack and NexRack are designed for continuous cycling, instant switchover and multi-hour capacity, making them the ideal solution to power GPU clusters without interruption.

## Trusted for Critical Infrastructure

From hyperscale data centers to hospitals, financial institutions, telecom hubs, and defense sites, NexEnergy delivers mission-critical reliability. Unlike lithium, which requires regular replacement, NexEnergy offers a true 25-year solution with no degradation, ensuring uninterrupted power for the world's most essential facilities.

## Proven in the Field

- Data Centre (EU): 1MW load, NexPack replacing genset reliance.
- Data Centre (Canada): NexRack replacing VRLA UPS systems.
- Automotive Facility (LATAM): NexRack reduced outages, stabilized systems, and cut electricity bills by 95%.
- ADNOC Drilling Rig (UAE): Hybridization eliminated one of four gensets.

## Why NexEnergy?

- Only electrostatic storage provider with field-proven deployments worldwide.
- Designed for AI-driven workloads, hyperscale expansion, colocation growth, and critical infrastructure.
- Delivering safe, sustainable, and cost-efficient alternatives to diesel and lithium.



NexEnergy is powering the AI era and safeguarding critical infrastructure where uptime, efficiency, and sustainability are non-negotiable.



# Comparison of Different Batteries VS NexEnergy

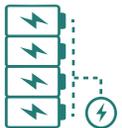
Attributes	Li-Ion	Lead Acid	Flow	NexCap	NexCap Advantage
Warranty	Up to 10 Years with Limited Capacity Warranty	3 years	-	Up to 15 years No EOL degradation	Maximum Value
DC round trip Eff.	80-90%	70%	65 – 75%	99%	Low Opex
DOD	70-80%	50 – 60%	100%	100%	Full Capacity
Exposure to Extreme Temperature	<50°C	<27°C	<50°C	-30°C~ to 70 °C	Any Environment
Charge Current Min – Max Voltage	Sev. Limited 3.7v to 4v	Sev. Limited 12.23v to 12.89v	Sev. Limited N/A	1C –2C (up to 150C) 43.2vdc to 60.8vdc	Fast Charging
Discharge Current.	2 Hrs	10 – 20 Hrs	2 – 10 Hrs	1C –2C (up to 150C)	Long Duration
No. of Cycles Module Level	6000 (max)	3000 (max.)	-	50,000 cycles (4 cycles a day)	Long Product Life
No. of Cycles Cell Level	6000 (max)	3000 (max.)	-	500,000 cell level	Long Product Life

Example	Attributes	CHEMICAL BATTERY	NexCap
	Name plate Capacity	1kWh	1kWh
	Equivalent Capacity (Derated for DOD & EOL Degradation)	0.4kWh -0.6kWh	1kWh
	No. of Banks in 10 Years	2 to 3	1
	Total Capacity Required for 10 Years of Operation	3kWh -5kWh	1kWh





## NexEnergy Advantage



Multiple Cycles per day  
Up to 4 cycles per day



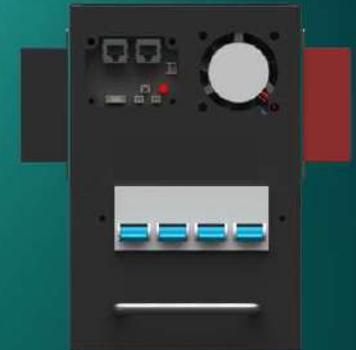
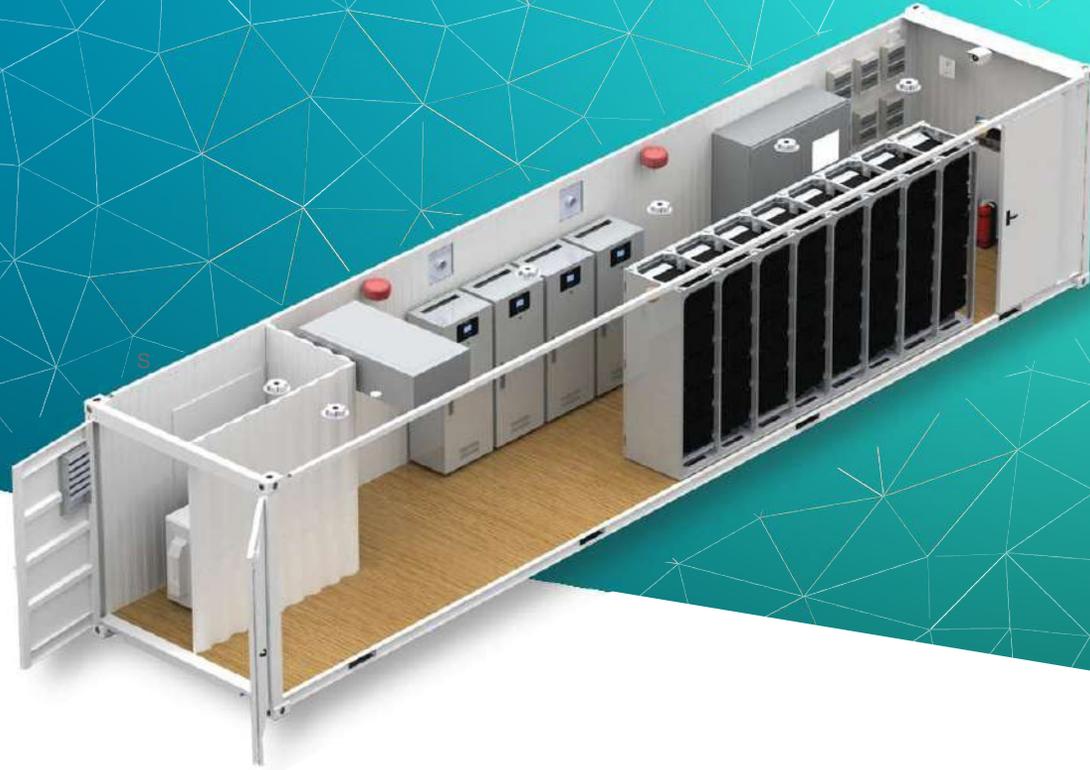
Lowest  
LCOS In the Industry



25 Years life  
No Degradation\*



Modular & Scalable  
From MWhs to multi-GWhs



## NexEnergy Advantage



Responsive  
Millisecond response time



Highly Efficient  
AC to AC RTE of 95%



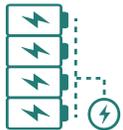
AC ready  
Power Conditioning & Regulation



25 Years life  
No Degradation\*



## NexEnergy Advantage



Up to 12C Discharge  
Ideal for Ride Through Applications



Reduced Footprint  
Saves one third space



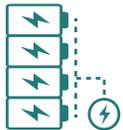
No Risk of Fire  
Chemical Free – No risk of thermal runaway



25 Years life  
No Degradation\*



## NexEnergy Advantage



Grid Tied & Off Grid  
MPPT included - Solar ready



Single & 3 Phase  
8 kh – 16 kWh

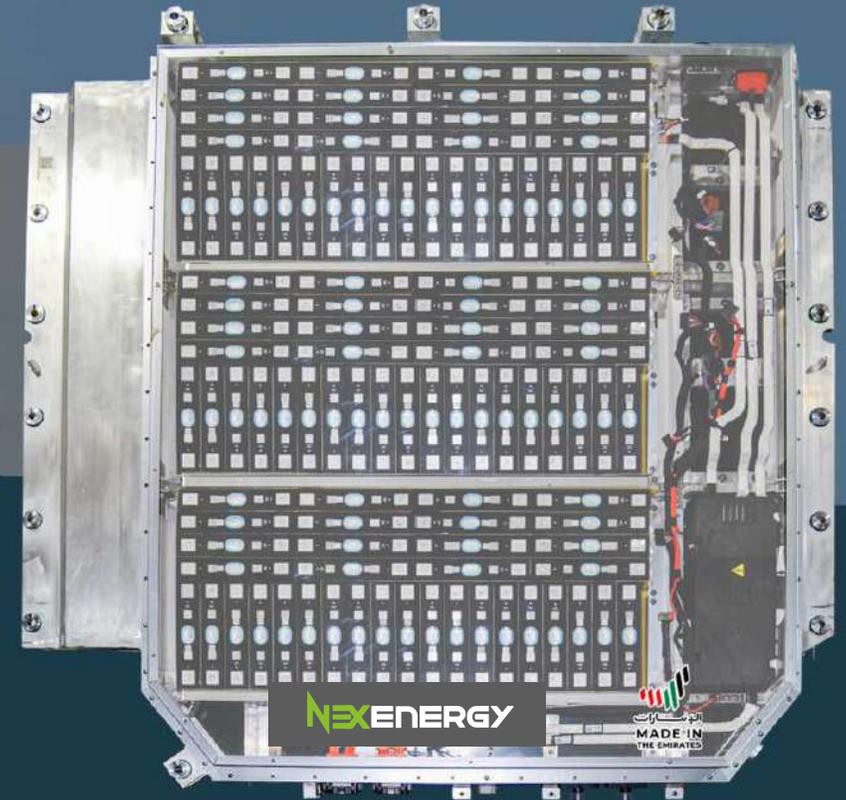


Plug & Play  
Easy to install and operate



25 Years life  
No Degradation\*

# Mobility Storage



## Key Features:

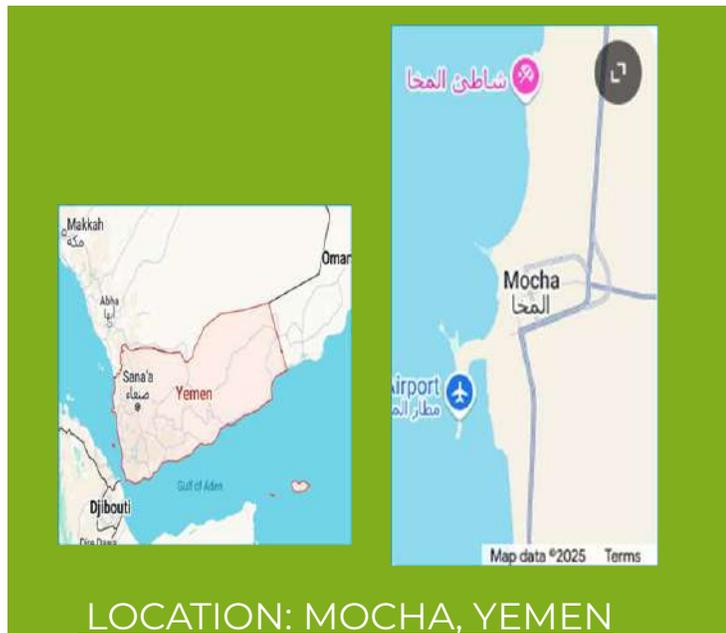
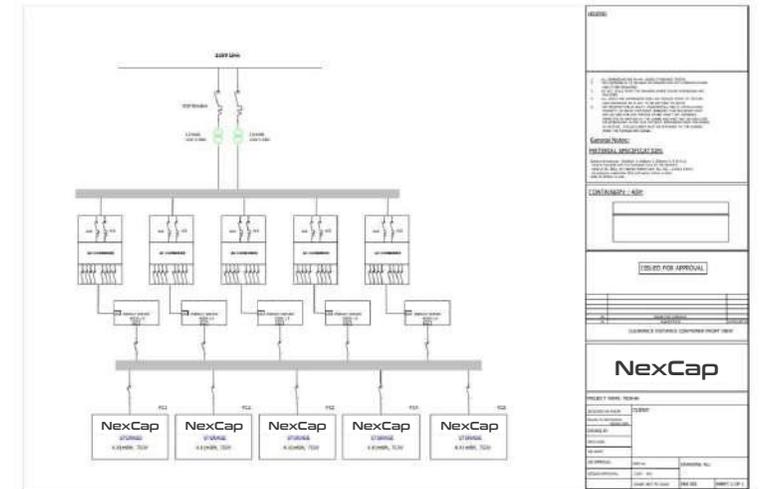
High Energy Density – 465 Wh/kg	Charging Time Under 6 minutes	Fast Charging
No Degradation	No Thermal Runaway Risk	Wide Operating Temperature
100% Depth of Discharge	10,000 Cycles	No Risk Of Fire

Applications:  Electric Vehicles  Drone  E-Boat  E-Bike





Project Name: **MCH**  
Project Size: 20MW-20MWH  
Application: Utility Scale BESS system  
Feeding Grid Forming, Grid Following  
Iputs: Solar+HFO Gensets+Grid



LOCATION: MOCHA, YEMEN





Project Name:  
MP – DATA CENTER

Project Size: 1MW LOAD-350KW STRINGS X 3  
Application: POWER BACKUP FOR 5 MINS  
FAST CHARGE-DISCHARGE  
INPUTS: GRID



LOCATION: OSLO, NORWAY



## FEATURES

### 1. EFFICIENT

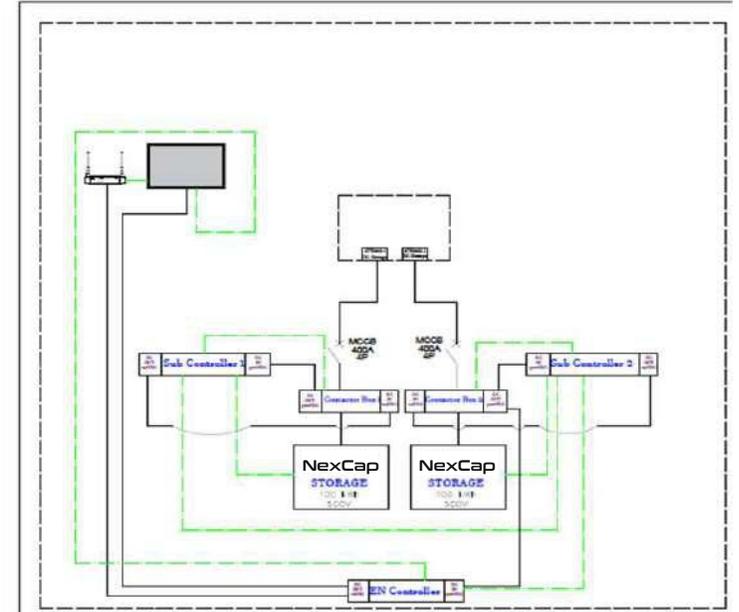
- Highly Efficient: > 95% RTE (Round Trip Efficiency)
- 100% DOD (Depth of Discharge)
- 500,000 Cell Life Cycles

### 2. SAFE & RELIABLE

- Wide Operating Temperature Range
- Deployable in Various Environments including High Altitudes
- No Thermal Runaway Risk



Project Name: **RDG – DATA CENTER**  
Project Size: 200kWH DC system  
Application: Backup system for Data Centre  
Inputs: Grid

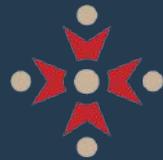


LOCATION: TORONTO, CANADA





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